| Notice of Allowability | Application No. | Applicant(s) |
|--|-------------------------|---------------------------------------|
| | 09/808,627 | SIM ET AL. |
| | Examiner | Art Unit |
| | Shawn S. An | 2613 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. | | |
| 1. This communication is responsive to 6/24/04 and 10/12/05. | | |
| 2. The allowed claim(s) is/are 2-12 and 14-24. | | |
| 3. Acknowledgment is made of a claim for foreign priority unerstanding a) All b) Some* c) None of the: 1. Certified copies of the priority documents have | been received. | |
| 2. Certified copies of the priority documents have been received in Application No. | | |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the | | |
| International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | | |
| | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) hereto or 2) to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
| Attachment(s) | | |
| 1. Notice of References Cited (PTO-892) | 5. Notice of Informal P | atent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. Interview Summary | · · · · · · · · · · · · · · · · · · · |
| 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date 6/14/2001 | Paper No./Mail Dat | te nent/Comment |
| 4. Examiner's Comment Regarding Requirement for Deposit | 8. X Examiner's Stateme | ent of Reasons for Allowance |
| of Biological Material | 9. 🗌 Other | |
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1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

IN THE CLAIMS:

A) Please cancel claims 1 and 13.

REMARKS:

Claims 1 and 13 have been canceled as above, as authorized by Applicants' attorney, Bradley Geist on October 12, 2005.

2. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.

SHAWN AN PRIMARY EXAMINER

10/12/05

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REASONS for ALLOWANCE

1. As per Applicants' instruction, claims 1 and 13 have been canceled as discussed in the **Examiner's Amendment** section.

2. Applicants' election with traverse of the Species III corresponding to claims 2-12 and 14-24, in the reply filed on 6/24/04, have been acknowledged.

The Examiner agrees with the Applicant's traversal. Therefore, all of the currently pending claims 2-12 and 14-24 will be examined.

3. The following is an Examiner's statement of reasons for allowance.

Claims 2-12 and 14-24 are allowed.

Claims 2-12 and 14-24 recite novel features of an apparatus/method for vector descriptor representation and multimedia data retrieval, comprising:

an orthogonal transform unit for orthogonally transforming feature values described by a vector descriptor;

<u>a feature value representation unit for representing the transformed feature</u>

<u>values from low frequency to high frequency feature:</u>

a quantization unit for quantizing the feature values represented in the feature value representation step;

a variable length coding unit for variable length coding and storing the quantized feature values and the number of feature values which are input;

a variable length inversely coding unit for extracting the feature values corresponding to the number of the feature values of the stored feature values and inversely coding the extracted feature values;

an inverse quantization unit for inversely quantizing the feature values inversely coded;

an inversely orthogonal transform unit for inversely and orthogonally transforming the inversely quantized feature values and restoring to original feature; and

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a comparing unit for comparing the restored feature values with feature values stored in a multimedia database and retrieving multimedia data.

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The prior art of records fail to anticipate or make obvious the novel features (emphasis added on <u>underlined limitations</u>) as discussed above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.
- A) Aoki et al (6,169,766 B1), Method and apparatus for detecting motion vector and image coding apparatus.
- B) Lee (5,668,600), Method and apparatus for encoding and decoding a video signal using feature point based motion estimation;
- C) Etoh (5,859,932), Vector quantization coding apparatus and decoding apparatus.
- 5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.
- 6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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7. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. <u>Please note the new fax number</u>.

SHAWN AN PRIMARY EXAMINER